

SEARCH REQUEST FORM

161

Requestor's

Name: Mano Padmanabham

Serial

Number: 08/845526

Date: 2/25/99

Phone: 306 2903

Art Unit: 2772

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

I am looking for creating tangent vectors or vectors from partial derivative or derivatives; normal vectors from these tangent vectors for [(NURBS or non-uniform rational b-splines or ~~Bezier~~ Bezier) patch or curve or surface] or any curved or surface

I've attached a copy of the claims for your reference.

Thank you!

mano

BEST AVAILABLE COPY

STAFF USE ONLY

Date-completed: 3/3/99

Searcher: David Holloway ^{308 7794}

Terminal time: 47

Elapsed time: 30

CPU time: 77

Total time: 1

Number of Searches: 49

Number of Databases: 49

Search Site

1 STIC ^{ETC}

 CM-1

 Pre-S

Type of Search

 N.A. Sequence

 A.A. Sequence

 Structure

Vendors

 IG

 STN

T Dialog

 APS

 Geninfo

 SDC

 DARC/Questel

Mano Padmanabhan:

Attached please find the results of your search request re: nurbs/bezier patches and vectors or derivatives.

Please let me know if you would like to try a different strategy or approach.

David Holloway
308-7794

Set	Items	Description
S1	168	NURBS OR (NONUNIFORM OR NON()UNIFORM) ()RATIONAL OR B()SPLI- NE? OR BSPLINE?
S2	31	S1 (S) (VECTOR? OR DERIVATIVE?)
S3	17	S2 AND BEZIER?
S4	17	S3 (S) (CURVE? OR SURFACE? OR ROUNDED OR OUTLINE? OR CROOK- ED OR UNEVEN OR BENT OR WARPED OR SKEW? OR TWIST?)
S5	10	S4 (S) (PIPE? OR RENDER? OR MODEL? OR REPRESENTAT? OR CAD)
S6	7077	IC=(G06F-017? OR G06F-011?)
S7	49	S1 AND BEZIER?
S8	4	(S2 OR S7) AND S6
S9	21	S4 OR S8
S10	12	S9 AND IC=G06F?
S11	12	S10 NOT AD>970425

File 348:European Patents 1978-1999/Feb W08
(c) 1999 European Patent Office

11/5/1

DIALOG(R)File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00728710

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Print system and method for presenting required record time of print system
Druckersystem und Verfahren zur Anzeige der erforderlichen Druckzeit des
Druckers

Système et methode d'impression pour afficher le temps d'impression requis
PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,
Tokyo, (JP), (applicant designated states: DE;FR;GB;IT;NL)

INVENTOR:

Yoshikawa, Naohiro, c/o Canon K.K., 30-2, 3-chome, Shimomaruko, Ohta-ku,
Tokyo, (JP)

LEGAL REPRESENTATIVE:

Tiedtke, Harro, Dipl.-Ing. (11949), Patentanwaltsburo

Tiedtke-Buhling-Kinne & Partner Bavariaring 4, D-80336 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 687972 A1 951220 (Basic)

APPLICATION (CC, No, Date): EP 95109099 950613;

PRIORITY (CC, No, Date): JP 94132184 940614; JP 95133729 950531

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G06F-003/12

ABSTRACT EP 687972 A1

A print system having a plurality of printers and a plurality of host computers connected to permit communication on a network, comprises a quantifying unit provided in each of the host computers for analyzing print data to be printed to quantify the print data to an index indicating complexity, a transmission unit provided in each of the host computers for adding the index quantified by the quantifying unit to the print data and transmitting the print data to one of the printers through the network, an operation unit provided in each of the printers for converting the index added to the print data transmitted from the transmission unit to a required record time based on a pre-registered conversion value, and a presentation unit provided in each of the printers for presenting the required record time converted by the operation unit. (see image in original document)

ABSTRACT WORD COUNT: 147

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 951220 A1 Published application (A1with Search Report
;A2without Search Report)

Examination: 960703 A1 Date of filing of request for examination:
960506

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	1526
SPEC A	(English)	EPAB95	11525
Total word count - document A			13051
Total word count - document B			0
Total word count - documents A + B			13051

11/5/2

DIALOG(R)File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00702733

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Method and system for automatically generating meshes.

Verfahren und System zum automatischen Erzeugen von Maschen.

Methode et système de generation de grilles automatique.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Shimada, Kenji, 3-2-11-308 Musukino, Midori-ku, Yokohama-shi,
Kanagawa-ken, (JP)

LEGAL REPRESENTATIVE:

Moss, Robert Douglas (34141), IBM United Kingdom Limited Intellectual
Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)
PATENT (CC, No, Kind, Date): EP 668572 A2 950823 (Basic)

EP 668572 A3 961120

APPLICATION (CC, No, Date): EP 95300964 950215;

PRIORITY (CC, No, Date): JP 9419226 940216

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06T-017/20; G06F-017/60

ABSTRACT EP 668572 A3

The present invention provides a system and method for automatically
generating meshes on a nonmanifold data model using a physical model.

A nonmanifold data model is prepared, a plurality of bubbles is placed
on the vertex and edge of said data model, and Newtonian equations
including a viscous term is solved based on interbubble force and bubble
mass by numerical analysis to move bubbles. At the point where bubble
movement is somewhat stabilized, line segments are generated by
connecting the centers of bubbles. Next, bubbles are placed on each
closed face of a nonmanifold data model and bubbles are moved based on a
dynamic model similar to the above. At the point where bubble movement
is somewhat stabilized, triangle elements are generated by connecting
the center points of bubbles based on a two-dimensional Delaunay's
method. Last, bubbles are placed on the closed face of a nonmanifold
data model and bubbles are moved based on a dynamic model similar to the
above. At the point where bubble movement is somewhat stabilized,
tetrahedron elements are generated by connecting the center points of
bubbles based on a three-dimensional Delaunay's method. (see image in
original document)

ABSTRACT WORD COUNT: 216

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 950823 A2 Published application (A1with Search Report
;A2without Search Report)

Examination: 960207 A2 Date of filing of request for examination:
951214

Search Report: 961120 A3 Separate publication of the European or
International search report

Withdrawal: 970226 A2 Date on which the European patent application
was withdrawn: 961224

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	1477
SPEC A	(English)	EPAB95	8271
Total word count - document A			9748
Total word count - document B			0
Total word count - documents A + B			9748

11/5/3

DIALOG(R) File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00649741

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

**Methods and apparatus for interpolating received values, image synthesis
and picture recordings.**

**Verfahren und Gerat zur Interpolation von Empfangswerten, Bildsynthese und
Bildaufzeichnungen.**

**Methode et appareil pour l'interpolation de valeurs recues, synthese et
enregistrement d'images.**

PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,
Tokyo, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

McInally, Thomas Callan, c/o Canon Research Centre, Europe Ltd, 20 Alan

Turing Road, Surrey Res. Park, Guildford, Surrey GU2 5YF, (GB)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick Court High Holborn, London WC1R 5DJ, (GB)
PATENT (CC, No, Kind, Date): EP 626648 A1 941130 (Basic)
APPLICATION (CC, No, Date): EP 94303771 940525;
PRIORITY (CC, No, Date): GB 9311157 930528
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-015/353

ABSTRACT EP 626648 A1

In an image synthesis system, a definer/editor (102) stores (1112) object definitions in the form of control points for spline curves. The system can generate "phantom control points" (A(sub 0) to A(sub(N+1))) to define a spline object, such that the curve interpolates a desired set of points (P(sub 1) to P(sub(N))) received from a user, for example via a mouse or graphics tablet. While the number N of received points, is variable, and may be large, the system operates quickly to generate coefficients (X(sub(ij))) which can be used to derive the phantom control points (A), without the need for matrix inversion, and without storing a large number of pre-inverted matrices. This permits intuitive interaction with the user for the definition of spline objects. For large numbers N where interactivity may even so become difficult to achieve, the system is able to generate approximate phantom points, each derived from a relatively small sub-set of the received points. (see image in original document)

ABSTRACT WORD COUNT: 166

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 941130 A1 Published application (A1with Search Report
;A2without Search Report)
Examination: 950628 A1 Date of filing of request for examination:
950421
Examination: 980722 A1 Date of despatch of first examination report:
980608

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	1919
SPEC A	(English)	EPABF2	10911
Total word count - document A			12830
Total word count - document B			0
Total word count - documents A + B			12830

11/5/4

DIALOG(R) File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00574294

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

A method generating a display of a surface, and an apparatus for carrying out such a method.

Gerat und Verfahren zur graphischer Darstellung von Flächen.

Procede et appareil pour l'affichage d'une surface dans un ecran.

PATENT ASSIGNEE:

HITACHI, LTD., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo 101, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Tokumasu, Shinji, 34-5 Nishinarusawa-cho 4-chome, Hitachi-shi, Ibaraki 316, (JP)

Nakajima, Norihiro, 28-1 Nishinarusawa-cho 1-chome, Hitachi-shi, Ibaraki 316, (JP)

Harashima, Ichiro, 19-5-204 Ishinazaka-cho 1-chome, Hitachi-shi, Ibaraki 319-12, (JP)

Arai, Hiroshi, 19-5-202 Ishinazaka-cho 1-chome, Hitachi-shi, Ibaraki 319-12, (JP)

LEGAL REPRESENTATIVE:

Calderbank, Thomas Roger et al (50122), MEWBURN ELLIS 2 Curator Street,
London EC4A 1BQ, (GB)

PATENT (CC, No, Kind, Date): EP 576218 A2 931229 (Basic)
EP 576218 A3 950322

APPLICATION (CC, No, Date): EP 93304782 930618;

PRIORITY (CC, No, Date): JP 92167528 920625

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-015/72

ABSTRACT EP 576218 A2

In order to generate a display of a surface, an equation or equations are generated corresponding to all or parts of the surface ((GAMMA)). The equation or equations represent the surface as a physical membrane. Boundary conditions ((GAMMA)) of the surface ((GAMMA)) can thus be specified, and the equation solved, using the boundary conditions ((GAMMA)) as outer constraints, to generate a display of the surface. A set of points (C, D, E) within the boundary of the surface ((GAMMA)) may be specified, which then define inner constraints for the solution of the equation. Where parts ((GAMMA))(sup 1), ((GAMMA))(sup 2), ((GAMMA))(sup 3)) of the surface join at a point (P123) or line ((gamma))(sup 1)(sup 2)), a further equation can be generated, which further equation represents the area ((GAMMA))(sup 1)(sup 2), ((GAMMA))(sup 1)(sup 2)(sup 3)) around the join as a physical membrane. Solution of that equation, preserving the boundary of the area ((GAMMA))(sup 1)(sup 2), ((GAMMA))(sup 1)(sup 2)(sup 3)) around the join, provides a smooth transition between the parts ((GAMMA))(sup 1), ((GAMMA))(sup 2), ((GAMMA))(sup 3)) of the surface. (see image in original document)

ABSTRACT WORD COUNT: 187

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 931229 A2 Published application (Alwith Search Report
;A2without Search Report)

Examination: 931229 A2 Date of filing of request for examination:
930708

Search Report: 950322 A3 Separate publication of the European or
International search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1049
SPEC A	(English)	EPABF1	5249
Total word count - document A			6298
Total word count - document B			0
Total word count - documents A + B			6298

11/5/5

DIALOG(R)File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00541364

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Support device for designing a free curved surface form.

Unterstützungsgerät für Entwurf von frei-gekrümmter Oberflächenform.

Appareil d'assistance pour la conception de formes de surface avec courbes libres.

PATENT ASSIGNEE:

Kao Corporation, (506780), 14-10, Nihonbashi Kayabacho 1-chome, Chuo-Ku
Tokyo 103, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Nishimine, Naohide, 3-15-1, Minatomachi, Funabashi-shi, Chiba 273, (JP)
Nakano, Takashi, 1-3, Asahigaokamachi, Hanamigawa-ku, Chiba-shi, Chiba
262, (JP)

Suzuki, Masayoshi, 1-3, Asahigaokamachi, Hanamigawa-ku, Chiba-shi, Chiba
262, (JP)

LEGAL REPRESENTATIVE:

Darby, David Thomas et al (29881), Abel & Imray Northumberland House
303-306 High Holborn, London WC1V 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 520731 A2 921230 (Basic)
EP 520731 A3 930728
APPLICATION (CC, No, Date): EP 92305726 920622;
PRIORITY (CC, No, Date): JP 91177353 910621
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-015/72
CITED PATENTS (EP A): EP 382495 A
CITED REFERENCES (EP A):
3RD INT. CONF. ON COMPUTER VISION December 1990, OSAKA, JAPAN pages 606 -
615 TERZOPOULOS D. ET AL 'Dynamic 3D Models with local and global
deformations: deformable superquadrics'
COMPUTER GRAPHICS vol. 17, no. 3, July 1983, pages 289 - 298 CHIYOKURA H.
ET AL. 'design of solids with free-form surfaces';

ABSTRACT EP 520731 A2

A support device, for designing a free curved surface shape, which automatically revises a large number of points constituting an already designed three dimensional surface near a specific point by using continuous scale functions when the specific point is revised. The support device enables rational and improved modification and revision of three dimensional shapes which pursue aesthetic sensitivity because it permits automatic revisions on a screen, such as that the shape should be deflated or inflated at certain parts. (see image in original document)

ABSTRACT WORD COUNT: 86

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 921230 A2 Published application (A1with Search Report
;A2without Search Report)
Search Report: 930728 A3 Separate publication of the European or
International search report
Examination: 940323 A2 Date of filing of request for examination:
940117
Withdrawal: 970625 A2 Date on which the European patent application
was deemed to be withdrawn: 970103

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	704
SPEC A	(English)	EPABF1	3854
Total word count - document A			4558
Total word count - document B			0
Total word count - documents A + B			4558

11/5/6

DIALOG(R)File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00514794

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Shape data processing method

Verfahren zur Verarbeitung von Formdaten

Procede de traitement de donnees de forme

PATENT ASSIGNEE:

SONY CORPORATION, (214022), 7-35, Kitashinagawa 6-chome Shinagawa-ku,
Tokyo, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Saito, Katsu, c/o Sony Corporation, 7-35 Kitashinagawa 6-chome,
Shinagawa-ku, Saitama, Tokyo, (JP)

Kuragano, Tetsuzo, c/o Sony Corporation, 7-35 Kitashinagawa 6-chome,
Shinagawa-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Korber, Wolfhart, Dr.rer.nat. et al (44471), Patentanwalte Mitscherlich &
Partner, Postfach 33 06 09, 80066 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 501494 A2 920902 (Basic)

EP 501494 A3 931103

EP 501494 B1 980520

APPLICATION (CC, No, Date): EP 92103400 920227;

PRIORITY (CC, No, Date): JP 9158153 910228

DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06T-007/60; G06F-017/50 ; G05B-019/19
CITED REFERENCES (EP A):

FEINWERKTECHNIK + MESSTECHNIK vol. 98, no. 5, May 1990, MUENCHEN DE pages
CA 146 - CA 150 S. BRUNO ET AL. 'Freiformfl chen graphisch-interaktiv
digitalisieren'
IEEE COMPUTER GRAPHICS AND APPLICATIONS vol. 9, no. 1, January 1989, NEW
YORK US pages 26 - 39 R. B. JERARD ET AL. 'Sculptured surfaces'
NTIS TECH NOTES August 1988, SPRINGFIELD, VA US pages 660 1 - 660 2
'USAETL tests volume computation method';

ABSTRACT EP 501494 A2

Disclosed is a shape data processing method illustratively for use with
a CAD/CAM (computer aided design/computer aided manufacturing) system.
The method involves measuring the volume (VM) of a target product (M)
based on the shape data of that product. In operation, a virtual
projection surface (K) is established for the target object (M) to be
measured. the surface of the object is divided into small regions
(S(u,v)1), (S(u,v)2). A column portion is formed as an extension from
each small region (S(u,v)1), (S(u,v)2) to the projection surface (K). The
volume (VM1, VM2) of the column portion is measured for each small
region. The measured volumes (VM1, VM2) are accumulated in accordance
with the orientation of the normal vector (n) to each small region
(S(u,v)1), (S(u,v)2). This method allows the volume (VM) of the target
(M) object to be measured easily and with precision even if the shape
thereof is complex. (see image in original document)

ABSTRACT WORD COUNT: 156

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 920902 A2 Published application (A1with Search Report
;A2without Search Report)
Change: 930512 A2 Representative (change)
Change: 931020 A2 Obligatory supplementary classification
(change)
Search Report: 931103 A3 Separate publication of the European or
International search report
Examination: 940601 A2 Date of filing of request for examination:
940405
Examination: 971001 A2 Date of despatch of first examination report:
970814
Grant: 980520 B1 Granted patent

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9821	419
CLAIMS B	(German)	9821	420
CLAIMS B	(French)	9821	484
SPEC B	(English)	9821	7681
Total word count - document A			0
Total word count - document B			9004
Total word count - documents A + B			9004

11/5/7

DIALOG(R)File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00512108

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Method of modifying a geometric object and computer aided design system.

Verfahren zur Modifizierung eines geometrischen Objektes und System zur
rechnergestutzten Konstruktion.

Procede de modification d'un objet geometrique et systeme de conception
assiste par ordinateur.

PATENT ASSIGNEE:

Hewlett-Packard GmbH, (292551), Herrenberger Strasse 130 Postfach 14 30,
W-7030 Boblingen, (DE), (applicant designated states: DE;FR;GB)

INVENTOR:

Metzger, Michael, Dr., Stuttgarter Strasse 37, W-7033 Herrenberg, (DE)
Kellermann, Hermann, Jesinger Hauptstrasse 110/1, W-7400 Tübingen 6, (DE)

LEGAL REPRESENTATIVE:

Kurz, Peter (57961), Fa. Hewlett-Packard GmbH, Patentabteilung,
Herrenberger Strasse 130, W-7030 Boblingen, (DE)

PATENT (CC, No, Kind, Date): EP 551543 A1 930721 (Basic)

APPLICATION (CC, No, Date): EP 92100634 920116;

PRIORITY (CC, No, Date): EP 92100634 920116

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-015/72

CITED PATENTS (EP A): US 4821214 A; US 4821214 A; EP 277832 A

CITED REFERENCES (EP A):

COMPUTER-AIDED DESIGN vol. 22, no. 9, November 1990, LONDON pages 609 -
616; DAVID F. ROGERS ET AL: 'Dynamic rational B-spline surfaces'

INSPEC Database; IEE London; D.R. Forsey et al: "Local refinement editing
of B-spline surfaces"; accession number C89003255;

ABSTRACT EP 551543 A1

In a computer aided design system, a geometric object is defined as a
function (17), preferably a B-Spline, of a piecewise polynomial function.
In order to make a local modification of said geometric object, a point
of origin (P) is picked. A second point (P') is defined as a target point
through which the modified function (19) should pass. The move from the
point of origin (P) to the target point (P') is transformed into a move,
preferably a parallel shift, of the control points of the associated
control polygons (18,20). (see image in original document)

ABSTRACT WORD COUNT: 98

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 930721 A1 Published application (A1with Search Report
;A2without Search Report)

Examination: 930818 A1 Date of filing of request for examination:
930621

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	843
SPEC A	(English)	EPABF1	8315
Total word count - document A			9158
Total word count - document B			0
Total word count - documents A + B			9158

11/5/8

DIALOG(R)File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00500141

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

FREE SURFACE DATA PREPARATION METHOD.

DATENVORBEREITUNGSVERFAHREN FÜR EINE FREIE FLACHE.

PROCEDE POUR ETABLIR DES DONNEES RELATIVES A UNE SURFACE LIBRE.

PATENT ASSIGNEE:

SONY CORPORATION, (214021), 7-35 Kitashinagawa 6-Chome Shinagawa-ku,
Tokyo 141, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

NOSAKA, Shiro, Sony Corporation 7-35, Kitashinagawa 6-chome, Shinagawa-ku
Tokyo 141, (JP)

KURAGANO, Tetsuzo, Sony Corporation 7-35, Kitashinagawa 6-chome,
Shinagawa-ku Tokyo 141, (JP)

LEGAL REPRESENTATIVE:

Turner, James Arthur et al (74631), D. Young & Co., 21 New Fetter Lane,
London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 464214 A1 920108 (Basic)

EP 464214 A1 930414

WO 9110965 910725

APPLICATION (CC, No, Date): EP 91902734 910118; WO 91JP45 910118

PRIORITY (CC, No, Date): JP 9010870 900121; JP 9044843 900226

DESIGNATED STATES: DE; FR; C
INTERNATIONAL PATENT CLASS: G06F-015/60

CITED PATENTS (WO A): JP 62173569 A

CITED REFERENCES (EP A):

PATENT ABSTRACTS OF JAPAN vol. 012, no. 429 (P-785)14 November 1988
PATENT ABSTRACTS OF JAPAN vol. 012, no. 429 (P-785)14 November 1988
PROCEEDINGS IECON '86 September 1986, MILWAUKEE, USA pages 61 - 66 N.
NAKAJIMA ET AL. 'Direct Generation of Solid Model from Wire-Frame Model
in CAD System';

ABSTRACT EP 464214 A1

In a free surface data preparation method for generating a free surface by spreading three-sided patches expressed by predetermined vector functions in a frame space, the method of the invention connects first and second three-sided patches by changing a common boundary arbitrarily with surface shapes maintained when changing of the common boundary is designated, and when changing of the common boundary is not designated, the method of the invention maintains the curved line shape of the common boundary, changes arbitrarily the surface shapes of the first and second three-sided patches and connects the first and second three-sided patches. Therefore, the surface shapes of the first and second three-sided patches after the connection can be selected according to a designation as to whether or not the common boundary is to be changed. The present invention satisfies only the condition where a first tangential vector extending along the common boundary at an arbitrary point on the common boundary and second and third tangential vectors crossing transversely the common boundary and extending in the direction of the first and second three-sided patches exist always on the same plane. Accordingly, the present invention can always connect the first and second three-sided patches reliably and smoothly. In a free surface preparation method, the present invention generates control points expressing the boundary curve of three-sided patches by using, as a frame, a plurality of triangles formed by connecting in proper quantities a plurality of points in three-dimensional data expressing a predetermined object by a plurality of groups of points existing on a plurality of parallel planes. Therefore, free surface data consisting of the aggregate of three-sided patches can be prepared easily from the three-dimensional data. (see image in original document)

ABSTRACT WORD COUNT: 286

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 920108 A1 Published application (A1with Search Report
;A2without Search Report)
Examination: 920108 A1 Date of filing of request for examination:
910918
Search Report: 930414 A1 Drawing up of a supplementary European search
report: 930224
Change: 960320 A1 Representative (change)
Examination: 970409 A1 Date of despatch of first examination report:
970225
Change: 971203 A1 Representative (change)

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	340
SPEC A	(English)	EPABF1	12621
Total word count - document A			12961
Total word count - document B			0
Total word count - documents A + B			12961

11/5/9

DIALOG(R)File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00430251

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

System for generating approximate curves and system for memorizing curves

**Erzeugungssystem von Approximationskurven und Kurvenspeicherung
Systeme pour generer des approximations de courbes et systeme pour
memoriser des courbes**

PATENT ASSIGNEE:

Stanley Electric Co., Ltd., (266000), 9-13, Nakameguro 2-chome, Meguro-ku
Tokyo 153, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Hosaka, Mamoru, 27-6 Sinmachi 1-chome, Setagaya-ku, Tokyo 154, (JP)
Saitoh, Tsuyoshi, Dai-2 Oohuna Parktown D-616, 521 Kasamamati,,
Sakae-ku, Yokohama-shi, Kanagawa 247,, (JP)
Kushimoto, Takuya, 932-37 Karasuyamacho, Koohoku-ku, Yokohama-shi,
Kanagawa 222, (JP)

LEGAL REPRESENTATIVE:

Calderbank, Thomas Roger et al (50122), MEWBURN ELLIS York House 23
Kingsway, London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 421566 A2 910410 (Basic)
EP 421566 A3 921014
EP 421566 B1 961227

APPLICATION (CC, No, Date): EP 90302744 900314;

PRIORITY (CC, No, Date): JP 89259663 891004

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: **G06F-017/17**

CITED PATENTS (EP A): US 4774685 A; WO 8402993 A; EP 191134 A

CITED REFERENCES (EP A):

ACM TRANSACTIONS ON GRAPHICS, ASSOCIATION FOR COMPUTING MACHINERY, NEW
YORK, US vol. 2, no. 1, January 1983, pages 1 - 31; T.PAVLIDIS: 'CURVE
FITTING WITH CONIC SPLINES'

IEEE COMPUTERS GRAPHICS AND APPLICATIONS, IEEE COMPUTER SOCIETY PRESS
vol. 9, no. 2, March 1989, LOS ALAMITOS, CA, US pages 58 - 66;

R.A.FOWELL: 'FASTER PLOTS BY FAN DATA-COMPRESSION'

ELECTRONIQUE APPLICATIONS, SOCIETE PARISIENNE D'EDITION no. 46, February
1986, PARIS, FRANCE pages 75 - 79; B.VELLIEUX: 'APROXIMATION DE
FONCTIONS NUMERIQUES: LA SYNTHESE PAR SEGMENTS SUCCESSIFS'

IEEE COMPUTER GRAPHICS AND APPLICATIONS, IEEE COMPUTER SOCIETY PRESS vol.
7, no. 4, April 1987, NEW YORK, US pages 45 - 58; L.PIEGL: 'INTERACTIVE
DATA INTERPOLATION BY RATIONAL BEZIER CURVES';

ABSTRACT EP 421566 A2

A system for generating approximate curves which takes out three
adjacent points from input points to generate quadratic rational **Bezier**
curve approximating the curve fitting these three points, extends the
curve to the maximum within the user-specified tolerance, and repeats
said processes.

A system for memorizing quadratic rational **Bezier** curves which
memorizes a tangent at a control point which is one side end of the first
curve, a control point which is another side end of the last curve,
control points which are one side ends of each curve and a camber vector.
(see image in original document) (see image in original document)

ABSTRACT WORD COUNT: 107

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 910410 A2 Published application (A1with Search Report
;A2without Search Report)

Examination: 910410 A2 Date of filing of request for examination:
901206

Search Report: 921014 A3 Separate publication of the European or
International search report

Examination: 951011 A2 Date of despatch of first examination report:
950825

Grant: 961227 B1 Granted patent

Oppn None: 971217 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	422
SPEC A	(English)	EPABF1	2398
Total word count - document A			2820
Total word count - document B			0

11/5/10

DIALOG(R) File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00399482

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

A feature based method of designing automotive panels.

Ein auf Merkmalen basierendes Verfahren zum Entwurf von Autoflachen.

Une methode de conception de panneaux d'automobile fondee sur des caracteristiques.

PATENT ASSIGNEE:

GENERAL MOTORS CORPORATION, (203111), General Motors Building 3044 West Grand Boulevard, Detroit Michigan 48202, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Caven dish, James Callison, 3449 Beach Road, Troy, Michigan 48084, (US)
Ross, Giles LeRoy, 11146 Woodbridge, Grand Blanc, Michigan 48439, (US)
Marin, Samuel Paul, 425 Timberline Drive, Rochester Hills, Michigan 48309, (US)

LEGAL REPRESENTATIVE:

Denton, Michael John et al (51983), Patent Section Vauxhall Motors Limited 1st Floor Gideon House 26 Chapel Street, Luton Bedfordshire LU1 2SE, (GB)

PATENT (CC, No, Kind, Date): EP 395224 A2 901031 (Basic)
EP 395224 A3 910102

APPLICATION (CC, No, Date): EP 90303306 900328;

PRIORITY (CC, No, Date): US 343753 890426

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: **G06F-015/72** ; G05B-019/41

CITED PATENTS (EP A): EP 253900 A; EP 253900 A; WO 8907291 A

CITED REFERENCES (EP A):

COMPUTER-AIDED DESIGN, vol. 21, no. 5, June 1989, pages 262-273, Butterworth & Co. (Publishers) Ltd, London, GB; L. PIEGL: "Key developments in computer-aided geometric design"

COMPUTER-AIDED DESIGN, vol. 12, no. 6, November 1980, pages 305-308, IPC Business Press, Vancouver, CA; J.P. DUNCAN et al.: "Simplified method for interactive adjustment of surfaces";

ABSTRACT EP 395224 A2

A method of forming a composite surface which is comprised of a base or primary surface and a number of features, and which satisfies certain functional objections. Implemented in a CAD system employed to assist in the design of automobile inner panels, the method accepts as input feature-based information which describes the geometry of a particular inner panel, and produces as an output a composite surface with a user-specified degree of smoothness. The method permits interactive design and modification of complex inner panel surfaces, and which significantly simplify attendant aspects of the panel design process such as NC-machining.

ABSTRACT WORD COUNT: 102

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 901031 A2 Published application (Alwith Search Report ;A2without Search Report)

Search Report: 910102 A3 Separate publication of the European or International search report

Change: 910102 A2 Obligatory supplementary classification (change)

Examination: 910417 A2 Date of filing of request for examination: 910219

Examination: 931201 A2 Date of despatch of first examination report: 931015

Withdrawal: 960327 A2 Date on which the European patent application was deemed to be withdrawn: 951001

LANGUAGE (Publication,Procedural,Application): English; English; English

*FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1260
SPEC A	(English)	EPABF1	6358
Total word count - document A			7618
Total word count - document B			0
Total word count - documents A + B			7618

11/5/11

DIALOG(R) File 348:European Patents

(c) 1999 European Patent Office. All rts. reserv.

00391802

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Method and system for acquiring interpolation points from straight short vectors representing figure in curve fitting.

Verfahren und System zur Gewinnung von Interpolationspunkten von eine Figur darstellenden kurzen geraden Vektoren in Kurvenberichtigung.

Methode et systeme pour acquerir des points d'interpolation a partir de vecteurs courts et droits representant une figure dans l'ajustement de courbes.

PATENT ASSIGNEE:

Kabushiki Kaisha Toshiba, (213137), 72, Horikawa-cho Saiwai-ku, Kawasaki-shi, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Yamada, Keiichi, c/o Intellectual Property Div., Toshiba, 1-1 Shibaura 1-chome, Minato-ku, Tokyo 105, (JP)

LEGAL REPRESENTATIVE:

Henkel, Feiler, Hanzel & Partner (100401), Mohlstrasse 37, D-8000 Munchen 80, (DE)

PATENT (CC, No, Kind, Date): EP 393679 A1 901024 (Basic)

APPLICATION (CC, No, Date): EP 90107459 900419;

PRIORITY (CC, No, Date): JP 89100534 890420

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-015/353

CITED REFERENCES (EP A):

COMPUTER VISION, GRAPHICS AND IMAGE PROCESSING, vol. 45, no. 1, January 1989, pages 117-125, Academic Press, Inc., Duluth, MN, US; B. PHAM: "Conic B-splines for curve fitting: a unifying approach";

ABSTRACT EP 393679 A1

In curve fitting for straight short vectors representing an original figure, an internally dividing point setting section (11) sets, on two adjacent vectors, internally dividing points at which the vectors are divided internally in predetermined ratios. An interpolation point setting section (12) sets the intersection of the straight line passing the internally dividing points of the two adjacent vectors and the perpendicular passing the connecting point of the two adjacent vectors as an interpolation point. In a curve-fitting process section (13), the curve fitting is performed on the basis of the acquired interpolation point.

ABSTRACT WORD COUNT: 98

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 901024 A1 Published application (A1with Search Report ;A2without Search Report)

Examination: 901024 A1 Date of filing of request for examination: 900516

Examination: 950308 A1 Date of despatch of first examination report: 950120

Refusal: 961016 A1 Date on which the European patent application was refused: 960527

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	393
SPEC A	(English)	EPABF1	1402

Total word count - document A 1795
Total word count - document B 0
Total word count - documents A + B 1795

11/5/12

DIALOG(R) File 348:European Patents
(c) 1999 European Patent Office. All rts. reserv.

00368055

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Graphical image editing

Graphische Bildaufbereitung

Edition d'image graphique

PATENT ASSIGNEE:

XEROX CORPORATION, (219781), Xerox Square - 020, Rochester New York 14644
, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Bier, Eric A., 191 Pine Lane, Los Altos California 94022, (US)
Kurlander, David J., 110 Morningside Drive Apt. No. 55, New York New York
10027, (US)

LEGAL REPRESENTATIVE:

Johnson, Reginald George et al (32372), Rank Xerox Ltd Patent Department
Parkway, Marlow Buckinghamshire SL7 1YL, (GB)

PATENT (CC, No, Kind, Date): EP 354031 A2 900207 (Basic)

EP 354031 A3 920212

EP 354031 B1 961113

APPLICATION (CC, No, Date): EP 89307893 890803;

PRIORITY (CC, No, Date): US 228882 880804

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06T-011/80; **G06F-017/50** ; G06K-009/64

CITED REFERENCES (EP A):

COMPUTER VISION GRAPHICS AND IMAGE PROCESSING. vol. 29, no. 1, January
1985, NEW YORK US pages 37 - 46; D. THALMANN ET AL.: 'Locating,
replacing, and deleting patterns in graphics editing of line drawings';

ABSTRACT EP 354031 A2

Methods and means are provided for searching digital synthetic graphics
data (e.g., displayed single-page scenes, multi-page files or multi-file
databases) to find graphical patterns which match a user-specified
graphical search pattern, together with methods and means (i) for
performing pre-recorded macro operations on all or some of the matches
that are found, or (ii) for substituting user-specified replacements for
some or all of the geometric characteristics and graphical properties of
the pattern matches that are found. (see image in original document)

ABSTRACT WORD COUNT: 85

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 900207 A2 Published application (A1with Search Report
;A2without Search Report)

Search Report: 920212 A3 Separate publication of the European or
International search report

Examination: 920930 A2 Date of filing of request for examination:
920805

Examination: 940914 A2 Date of despatch of first examination report:
940728

Change: 950726 A2 Representative (change)

Change: 951004 A2 Representative (change)

Grant: 961113 B1 Granted patent

Oppn None: 971105 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A (English) EPABF1 226

SPEC A (English) EPABF1 15122

Total word count - document A 15348

Total word count - document B 0

Total word count - documents A + B 15348